# OPINIONS AND DECLARATIONS RENDERED BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

Edited by

FRANCIS HEMMING, C.M.G., C.B.E.

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#### **OPINION 563**

Interpretation under the Plenary Powers of the nominal species Aphis padi Linnaeus, 1758 (Class Insecta, Hemiptera)

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## INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

### COMPOSITION AT THE TIME OF THE ADOPTION OF THE RULING GIVEN IN OPINION 563

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President: Professor James Chester Bradley (Cornell University, Ithaca, N.Y., U.S.A.) (12th August 1953)

Vice-President: Senhor Dr. Afranio do AMARAL (Sao Paulo, Brazil) (12th August 1953)

Secretary: Mr. Francis HEMMING (London, England) (27th July 1948)

#### B. The Members of the Commission

(Arranged in order of precedence by reference to date of election or of most recent re-election, as prescribed by the International Congress of Zoology)

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Mr. Francis Hemming (London, England) (27th July 1948) (Secretary)

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Professor Pierre Bonnet (Université de Toulouse, France) (9th June 1950)

Mr. Norman Denbigh RILEY (British Museum (Natural History), London) (9th June 1950)

Professor Tadeusz Jaczewski (Institute of Zoology, Polish Academy of Sciences, Warsaw, Poland) (15th June 1950)

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Dr. K. H. L. Key (Commonwealth Scientific and Industrial Research Organisation, Canberra, A.C.T., Australia) (15th October 1954)

Dr. Alden H. MILLER (Museum of Vertebrate Zoology, University of California, U.S.A.) (29th October 1954)

Doc. Dr. Ferdinand PRANTL (Národni Museum V Praze, Prague, Czechoslovakia) (30th October 1954)

Professor Dr. Wilhelm Kühnelt (Zoologisches Institut der Universität, Vienna, Austria) (6th November 1954)

Professor F. S. Bodenheimer (The Hebrew University, Jerusalem, Israel) (11th November 1954)

Professor Ernst MAYR (Museum of Comparative Zoology at Harvard College, Cambridge, Massachusetts, U.S.A.) (4th December 1954)

Professor Enrico Tortonese (Museo di Storia Naturale "G. Doria", Genova, Italy) (16th December 1954)

#### OPINION 563

# INTERPRETATION UNDER THE PLENARY POWERS OF THE NOMINAL SPECIES "APHIS PADI" LINNAEUS, 1758 (CLASS INSECTA, ORDER HEMIPTERA)

RULING:—(1) Under the Plenary Powers it is hereby directed that the nominal species Aphis padi Linnaeus, 1758, be interpreted by reference to the description published for that nominal species by Schrank in 1801 (Fauna boica 2:115).

(2) The under-mentioned specific name is hereby placed on the Official List of Specific Names in Zoology with the Name Number 1649:—

padi Linnaeus, 1758, as published in the combination Aphis padi, and interpreted in accordance with the direction given under the Plenary Powers in (1) above (Class Insecta, Order Hemiptera).

#### I. THE STATEMENT OF THE CASE

On 16th May 1957 Dr. J. P. Doncaster (British Museum (Natural History), London) submitted to the Commission the following application in which he asked that the Plenary Powers be used to direct that the specific name padi Linnaeus, 1758, as published in the combination Aphis padi, be interpreted by reference to Schrank (1801), thereby securing a firm basis for the continued use of that name for the species known as the European Bird Cherry Aphid:—

Proposed use of the Plenary Powers to validate the application of the specific name "padi" Linnaeus, 1758, as published in the combination "Aphis padi" to the European Bird Cherry Aphid (Class Insecta, Order Hemiptera)

By J. P. DONCASTER (British Museum (Natural History), London)

It is the purpose of the present application to ask the International Commission on Zoological Nomenclature to use its Plenary Powers to validate the application of the specific name *padi* Linnaeus, 1758, as published in the combination *Aphis padi*, to the common European Bird Cherry Aphid, in order to preserve a name which is appropriate and in common use, but the application of which in this sense is invalid according to the Rules.

- 2. The name Aphis padi Linnaeus is, and has been, applied by the majority of aphidologists to the European Bird Cherry Aphid, which, with the exception of one rather rare species, is the only aphid known to use Prunus padus as a primary host in Europe, although, according to the Rules, it would seem to apply to a totally unrelated species, the Mealy Plum Aphid. As the name pruni Geoffroy, 1762, has already been placed on the Official List for the Mealy Plum Aphid (Opinion 397, July, 1956) padi cannot supplant it (Bull. zool. Nomencl. 4: 270, Conclusion 42(1)(b)), but the name padi cannot now be used in any other sense without appropriate action by the Commission.
- 3. Linnaeus (Syst. Nat. (Ed. 10) 1:451) gives the following entry under the heading "APHIS":

Padi. 7. A. Pruni Padi,

Reaum. ins. 3. t. 23. f. 9. 10.

Habitat in Pruno Pado.

- 4. As Linnaeus, did not describe padi and his citation of a host species (Prunus padus) does not, according to Conclusion 21 of the Commission (Bull. zool. Nomencl. 4: 256), in itself constitute an "indication", the aphid can be identified only from the citation of Réaumur's figures 9 and 10, which show aphids attacking leaves of plum. It must be accepted that the description in Réaumur's text (p. 317), relating to these figures is to be identified as the Mealy Plum Aphid, as this has been decided by Opinion 397. But as the reference to Réaumur cited for padi is identical with that cited for pruni, it would therefore appear that padi must, on the same reasoning, also be the Mealy Plum Aphid, unless it is contended that either or both of Réaumur's figures depict a species different from the one he described, for which there appears to be no valid evidence. Indeed, not only does Réaumur's description of the Mealy Plum Aphid (p. 317) include a reference to both figures 9 and 10 together, but earlier in his account (p. 296) he seems to imply that these figures illustrate two different sorts of damage caused by the same species.
- 5. This view, however, was not accepted by Theobald (1927, Aphididae of Gt. Britain 2: 403) who, though he did not doubt that Réaumur's figure 9 applied to the Mealy Plum Aphid, considered that figure 10 applied to the unrelated Leaf-curling Plum Aphid and restricted the name padi to the latter. Theobald's interpretation was followed by many entomologists, who consequently found themselves at variance with other workers; but, in any case, the divergence of opinion on the identity of Aphis padi Linnaeus would appear to show that, if it is not the Mealy Plum Aphid, it must be considered unidentifiable.
- 6. The case for validating the name padi for the Bird Cherry Aphid is strong. Not only is the name highly appropriate in that it indicates the only known primary host of the species in Europe, but most authors of major works on aphid systematics have used the name padi in this sense. They include Schrank, who published the first clearly recognisable description of the Bird Cherry Aphid under this name (1801, Fauna boica 2:115), Kaltenbach, Walker, Koch, del Guercio, van der Goot, Mordvilko, Börner and Hille Ris Lambers. The morphology and biology of the Bird Cherry Aphid have been described by Rogerson (1947, Bull. ent. Res. 38(1):158), who used the now widely accepted combination Rhopalosiphum padi (Linnaeus). The validation of padi for the Bird Cherry Aphid, therefore, would stabilise a name already well established and about the application of which there is a wide measure of agreement.
- 7. Although, as already noted, the citation of a host plant unaccompanied by any description does not constitute a valid "indication" under the existing Règles, it cannot be doubted that, when Linnaeus cited Prunus padus as the host for his species Aphis padi, he intended to convey that that name applied to the European Bird Cherry Aphid, since the citation of that host is entirely inappropriate for the species figured by Réaumur on the plate cited by Linnaeus. Thus, a solution on the lines now recommended would not only serve the valuable purpose of stabilising the name for the European Bird Cherry Aphid but would also be in harmony with the intention of Linnaeus, even though under the present Règles he failed to give effect to that intention.
- 8. For the reasons stated above, the International Commission on Zoological Nomenclature is now asked:—
  - (1) to use its Plenary Powers to direct that the nominal species Aphis padi

- Linnaeus, 1758, be interpreted by reference to the description given therefor by Schrank in 1801 (Faun. boic. 2:115);
- (2) to place the under-mentioned specific name on the Official List of Specific Names in Zoology:—

padi Linnaeus, 1758, as published in the combination Aphis padi, the entry so to be made to be endorsed that the nominal species so named be interpreted in accordance with the directions given under the Plenary Powers in (1) above.

#### II. THE SUBSEQUENT HISTORY OF THE CASE

- 2. Registration of the present application: Upon the receipt of Dr. Doncaster's application, the question of the possible use of the Plenary Powers for the purpose of interpreting the nominal species *Aphis padi* Linnaeus, 1758, was allotted the Registered Number Z.N.(S.)1225.
- 3. Publication of the present application: The present application was sent to the printer on 22nd May 1957 and was published on 26th August of the same year in Part 8 of Volume 13 of the Bulletin of Zoological Nomenclature (Doncaster (J.P.), 1957, Bull. zool. Nomencl. 13: 248-250).
- **4. Issue of Public Notices:** Under the revised procedure prescribed by the Thirteenth International Congress of Zoology, Paris, 1948 (1950, Bull. zool. Nomencl. **4:** 51–56), Public Notice of the possible use by the International Commission on Zoological Nomenclature of its Plenary Powers in the present case was given on 26th August 1957 (a) in Part 8 of Volume 13 of the Bulletin of Zoological Nomenclature (the Part in which Dr. Doncaster's application was published) and (b) to the other prescribed serial publications. In addition, such Notice was given also to four general zoological serial publications and to seven entomological serials in Europe and America.
- 5. Support received from Miss Miriam A. Palmer: On 29th October 1957 Miss Miriam A. Palmer (Colorado State University, Department of Entomology, Fort Collins, Colorado, U.S.A.) addressed to the Office of the Commission the following letter in support of the application submitted in the present case (Palmer (M.A.), 1957, Bull. zool. Nomencl. 16:48):—

Doncaster's paper regarding Aphis padi has just been received.

- I favor the action proposed therein, namely: to validate the name Aphis padi Linnaeus as applying to the European bird cherry aphid.
- **6.** No Objection Received: No objection to the present application was received from any source.

## III. THE DECISION TAKEN BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

7. Issue of Voting Paper V.P.(58)6: On 17th March 1958, a Voting Paper (V.P.(58)6) was issued in which the Members of the Commission were invited to vote either for, or against, "the proposal relating to the interpretation of the nominal species Aphis padi Linnaeus, 1758 (Class Insecta, Order Hemiptera),

as set out in Points (1) and (2) in paragraph 8 on page 250 of Volume 13 of the *Bulletin of Zoological Nomenclature* "[i.e. in the Points numbered as above in paragraph 8 of the paper reproduced in the first paragraph of the present *Opinion*].

- 8. The Prescribed Voting Period: As the foregoing Voting Paper was issued under the Three-Month Rule, the Prescribed Voting Period closed on 17th June 1958.
- 9. Particulars of the Voting on Voting Paper V.P.(58)6: At the close of the Prescribed Voting Period, the state of the voting on Voting Paper V.P.(58)6 was as follows:—
  - (a) Affirmative Votes had been given by the following twenty-three (23) Commissioners (arranged in the order in which Votes were received):

Holthuis; Lemche; Hering; Mayr; Vokes; Prantl; Key; Jaczewski; Hankó; Dymond; Riley; Bonnet; Bodenheimer; Boschma; Mertens; do Amaral; Sylvester-Bradley; Cabrera; Bradley (J.C.); Stoll; Hemming; Kühnelt; Tortonese;

(b) Negative Votes:

None:

(c) On Leave of Absence, one (1):

Miller;

(d) Voting Papers not returned:

None.

- 10. Declaration of Result of Vote: On 18th June 1958, Mr. Hemming, Secretary to the International Commission, acting as Returning Officer for the Vote taken on Voting Paper V.P.(58)6, signed a Certificate that the Votes cast were as set out in paragraph 9 above and declaring that the proposal submitted in the foregoing Voting Paper had been duly adopted and that the decision so taken was the decision of the International Commission in the matter aforesaid.
- 11. Preparation of the Ruling given in the present "Opinion": On 26th June 1958 Mr. Hemming prepared the Ruling given in the present *Opinion* and at the same time signed a Certificate that the terms of that Ruling were in complete accord with those of the proposal approved by the International Commission in its Vote on Voting Paper V.P.(58)6.
- 12. Original Reference for a Specific Name: The following is the original reference for the name placed on the Official List of Specific Names in Zoology by the Ruling given in the present Opinion:—

padi, Aphis, Linnaeus, 1758, Syst. Nat. (ed. 10)1:451

13. Compliance with Prescribed Procedures: The prescribed procedures were duly complied with by the International Commission on Zoological Nomenclature in dealing with the present case, and the present Opinion is accordingly hereby rendered in the name of the said International Commission by the under-signed Francis Hemming, Secretary to the International Commission

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on Zoological Nomenclature, in virtue of all and every the powers conferred upon him in that behalf.

14. "Opinion" Number: The present *Opinion* shall be known as *Opinion* Five Hundred and Sixty-Three (563) of the International Commission on Zoological Nomenclature.

DONE in London, this Twenty-Sixth day of June, Nineteen Hundred and Fifty-Eight.

Secretary to the International Commission on Zoological Nomenclature

#### FRANCIS HEMMING

